

# Notice of Allowability

Application No.

10/660,361

Examiner

Sam Rizk

Applicant(s)

HONARY ET AL.

Art Unit

2133

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 9/25/2006.
2. ☒ The allowed claim(s) is/are 4-10, 14, 20.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

- |  |   |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application                     |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input type="checkbox"/> Examiner's Amendment/Comment                              |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|  | 9. <input type="checkbox"/> Other _____   |

ALBERT DECADY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

### **DETAILED ACTION**

- Response to the applicant's amendment dated 9/25/2006
- Claims 1-3, 11-13 and 21-23 have been Cancelled
- Amended claims 4-10 and 14-20 have been submitted for examination
- Amended claims 14-10 and 14-20 have been allowed

### ***Response to Arguments***

1. Applicant's arguments, see page 7, filed on 9/25/2006, with respect to amended claim 4 have been fully considered and are persuasive. The rejection of claim 4 has been withdrawn.

### **REASONS FOR ALLOWANCE**

The following is an examiner's statement of reasons for allowance:

2. The prior Art of record and in particular Box does not teach, suggest or otherwise render obvious all the elements as in claim 4 below (emphasis added):
  - (currently amended) An apparatus comprising:
  - an instruction decoder;
  - at least one control register coupled to the instruction decoder;
  - an add-compare-select (ACS) engine coupled to the at least one control register, said
  - ACS engine including:
  - a plurality of ACS units to perform ACS operations;
  - a branch metric register coupled to the ACS units to supply branch metric data to the ACS units; and

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- a plurality of accumulators coupled to the ACS units to store results of the ACS operations performed by the ACS units; and
- a memory coupled to the ACS units, to the branch metric register, and to the accumulators;
- wherein the instruction decoder is operative to control the ACS engine to perform a first Viterbi decoding mode in response to the instruction decoder receiving a first instruction, the instruction decoder is further operative to control the ACS engine to perform a second Viterbi decoding mode different from the first Viterbi decoding mode in response to the instruction decoder receiving a second instruction, and the instruction decoder is further operative to control the ACS engine to perform turbo decoding in response to the instruction decoder receiving a third instruction; and
- wherein in a the first Viterbi decoding mode path metrics are updated from the accumulators and in the second Viterbi decoding mode path metrics are updated from the memory.

3. Claims (5-10) depend from claims 1.
4. Claim 14 has similar language as in claim 4.
5. Claims (15-20) depend from claim 14

**Conclusion**

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Rizk whose telephone number is (571) 272-8191. The examiner can normally be reached on M-F 8-5.

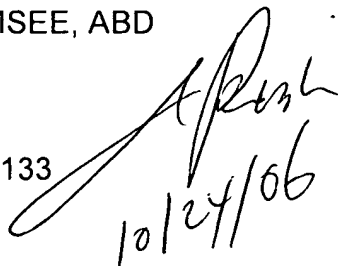
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronics Business Center (EBC) at 866-217-9197 (toll-free)

Sam Rizk, MSEE, ABD

Examiner

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10/24/06



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